

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

MONITORING AND REPORTING PROGRAM NO. 00-032 (REVISION NO. 1)
FOR
COACHELLA SANITARY DISTRICT, OWNER/OPERATOR
WASTEWATER TREATMENT PLANT
Coachella – Riverside County

Location of Discharge: NW 1/4, Section 15, T6S, R8E, SBB&M

MONITORING

1. The collection, preservation and holding times of all samples shall be in accordance with U. S. Environmental Protection Agency approved procedures. All analyses shall be conducted by a laboratory certified by the State Department of Health Services to perform the required analyses.
2. Samples shall be collected at the location specified in the permit. If no location is specified, sampling shall be conducted at the most representative sampling point available.
3. If the facility is not in operation, or there is no discharge during a required reporting period, the discharger shall either forward a letter, or write a notation on the required monthly monitoring report to the Regional Board, indicating that there has been no activity during the required reporting period.

INFLUENT MONITORING

The wastewater influent to the treatment facilities shall be monitored as follows:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
20°C BOD ₅	mg/L ¹	24-Hr. Composite	Weekly
Suspended Solids	mg/L	24-Hr. Composite	Weekly

¹ mg/L – milligrams-per-Liter

EFFLUENT MONITORING

Effluent wastewater from the activated sludge plant shall be tested. In addition, flows from the oxidation ponds shall be tested. Separate sampling stations shall be established at suitable locations, where representative samples of the wastewater shall be collected and monitored for the following constituents:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Daily Effluent Discharge	MGD ²	Flow Meter Reading	Daily ³
Settleable Matter	ml/L ⁴	Grab at Peak Flow	Twice-Weekly
Suspended Solids	mg/L	24-Hr. Composite	Twice-Weekly
20°C BOD ₅	mg/L	24-Hr. Composite	Weekly
pH		Grab	Daily ⁵

In addition, a representative sample from the total combined flow shall be collected prior to discharge from the common outfall and shall be monitored for constituents/parameters indicated below:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Fecal Coliform	MPN ⁶ /100 ml	Grab	Twice-Weekly
Chlorine Residual ⁷	mg/L	Continuous	Daily
Nitrates as Nitrogen (N)	mg/L	24-Hr. Composite	Twice Monthly
Nitrites as N	mg/L	24 Hr. composite	Twice Monthly
Ammonia Nitrogen as N	mg/L	24-Hr. Composite	Twice Monthly
Total Nitrogen as N	mg/L	24-Hr. Composite	Twice Monthly
Total Phosphate as Phosphorus (P)	mg/L	24-Hr. Composite	Twice Monthly
Ortho-Phosphate as P	mg/L	24-Hr. Composite	Twice Monthly
Total Dissolved Solids	mg/L	24-Hr. Composite	Twice Monthly
<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>

² MGD – Million Gallons-Per-Day

³ Reported monthly with monthly average daily flow

⁴ ml/L – milliliters-per-Liter

⁵ Daily (excluding holidays and weekends)

⁶ MPN – Most Probable Number

⁷ The discharger may monitor for dechlorinating agent residual and report residual chlorine as nondetectable if the dechlorinating agent is present. Continuous sampling shall begin Feb. 1, 2001. A grab sample shall be performed 3 times daily and the average result indicated on the report until continuous sampling begins.

Volatile Organic Compounds (EPA Methods 624 and 625)	µg/L ⁸	Grab	Annually
Oil and Grease	mg/L	24-Hr. Composite	Annually
Sulfates	mg/L	24-Hr. Composite	Quarterly
Chloride	mg/L	24-Hr. Composite	Quarterly
Acute Bioassay ⁹	% survival	24-Hr. Composite	Monthly
Chronic Bioassay	tu _c ¹⁰	24-Hr. Composite	Monthly
Hardness (as CaCO ₃)	mg/L	Grab	Quarterly
Temperature	°F	Grab	Daily

Should the discharger need to install additional outfall lines in the future to meet necessary discharge capacity, then the constituents/parameters being monitored for the above total combined flow shall be done likewise for each outfall line.

RECEIVING WATER MONITORING

All receiving water samples shall be grab samples. Sampling stations shall be as follows:

<u>Station</u>	<u>Description</u>
R-1	Not to exceed 100 feet upstream from the point of discharge. A greater distance may be acceptable provided the discharger submits proper justification that the prescribed distance is inaccessible.
R-2	Not to exceed 25 feet downstream of the discharge pipe outlet.

<u>Constituent</u>	<u>Unit</u>	<u>Station</u>	<u>Sampling Frequency</u>
Temperature	°F	R-1, R-2	Monthly
Chlorine Residual ¹¹	mg/L	R-1, R-2	Monthly
Dissolved Oxygen	mg/L	R-1, R-2	Monthly

<u>Constituent</u>	<u>Unit</u>	<u>Station</u>	<u>Sampling Frequency</u>
Nitrates	mg/L	R-1, R-2	Monthly
Ammonia	mg/L	R-1, R-2	Monthly

⁸ µg/L – micrograms-per-Liter

⁹ Acute bioassay shall be calculated from chronic bioassay test.

¹⁰ Toxic Units (as described in the Chronic Toxicity Testing Section)

¹¹ The discharger may monitor for dechlorinating agent residual and report residual chlorine as nondetectable if the dechlorinating agent is present.

Total Nitrogen	mg/L	R-1, R-2	Monthly
Total Phosphate	mg/L	R-1, R-2	Monthly
pH	----	R-1, R-2	Monthly
Hardness (CaCO ₃)	mg/L	R-1, R-2	Monthly

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions at Stations R1 and R2. Attention shall be given to the presence or absence of:

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|--|---|
| a. Floating or suspended matter | d. Visible film, sheen or coating |
| b. Discoloration | e. Fungi, slime, or objectionable growths |
| c. Aquatic life (including plants, fish
shellfish, birds) | f. Potential nuisance conditions |

In the event that no effluent is present at station R1, no receiving water monitoring data is required for station R1.

Notes on receiving water conditions shall be summarized in the monitoring report.

2,3,7,8- TETRACHLORODIBENZO-P-DIOXIN (TCDD)
EQUIVALENT MONITORING

By May 18, 2001, the discharger shall begin monitoring its effluent for the presence of 17 (Toxic equivalency factors for 2,3,7,8-tetrachlorodibenzo-p-dioxin equivalents) congeners once during the dry weather and once during the wet weather each year for a period of three consecutive years. The congeners and Toxic Equivalent Factors can be found in Table 4 of the *"Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California."*

A copy of Table 4 is shown below.

Table 4

<u>Congener</u>	<u>TEF</u>
2,3,7,8- Tetra chlorodibenzo-p-dioxin (CDD)	1
1,2,3,7,8- Penta-CDD	1.0
1,2,3,4,7,8- Hexa-CDD	0.1
1,2,3,6,7,8- Hexa-CDD	0.1
1,2,3,7,8,9- Hexa-CDD	0.1
1,2,3,4,6,7,8- Hepta-CDD	0.01
OctaCDD	0.0001
2,3,7,8- Tetra chlorodibenzofuran (CDF)	0.1
1,2,3,7,8- Penta-CDF	0.05
2,3,4,7,8- Penta-CDF	0.5
1,2,3,4,7,8- Hexa-CDF	0.1
1,2,3,6,7,8- Hexa-CDF	0.1
1,2,3,7,8,9- Hexa-CDF	0.1
2,3,4,6,7,8- Hexa-CDF	0.1
1,2,3,4,6,7,8- Hepta-CDF	0.01
1,2,3,4,7,8,9- Hepta-CDF	0.01
Octa-CDF	0.0001

The discharger shall report for each congener the analytical results of the effluent monitoring, including the quantifiable limit and the Method Detection Limit¹², and the measured or estimated concentration. In addition, the discharger shall multiply each measured or estimated congener concentration by its respective Toxic Equivalent Factors¹³ value and report the sum of these values. This information shall be submitted as part of the discharger's monitoring reports.

OPERATION AND MAINTENANCE

The discharger shall inspect and document any operation/maintenance problems by inspecting each unit process. In addition, the discharger shall ensure proper calibration of meters and

¹² As determined by the procedure found in 40 CFR 136 (revised as of May 14, 1999)

¹³ Table 4 Toxic Equivalency Factors (TEFs) for 2, 3, 7, 8- TCDD Equivalents, pg. 27, Policy for Implementation of Toxics, Standard for Inland Surface Waters, Enclosed Bays and Estuaries of California, Adopted March 2, 2000

equipment annually. The results of the operation and maintenance inspections and calibration records shall be forwarded to this Regional Board annually.

The amount of chlorine and dechlorinating agent shall be monitored daily and reported monthly.

Chlorine shall be measured in pounds per day and the dechlorinating agent shall be measured in gallons and pounds per day of dechlorinating agent.

PRETREATMENT REPORT

In the event that the discharger is required to implement a pretreatment program then the discharger shall submit reports as required in accordance with Section F. Pretreatment and Appendix – Requirements for Pretreatment Annual Report of the Waste Discharge Requirements.

SLUDGE MONITORING

The discharger shall report annually on the quantity, location and method of disposal of all sludge and similar solid material being produced at the wastewater treatment plant facility.

The sludge that is generated at the treatment facility and removed for disposal shall be sampled and analyzed for the following:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Arsenic	mg/kg ¹⁴	Grab	Annually
Cadmium	mg/kg	Grab	Annually
Nickel	mg/kg	Grab	Annually
Copper	mg/kg	Grab	Annually
Lead	mg/kg	Grab	Annually
Mercury	mg/kg	Grab	Annually
Molybdenum	mg/kg	Grab	Annually
Selenium	mg/kg	Grab	Annually
Zinc	mg/kg	Grab	Annually
Fecal Coliform	MPN/gram	Grab	Annually

EFFLUENT TOXICITY TESTING

The discharger shall conduct chronic toxicity testing on the effluent as follows:

<u>Test</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Test</u>
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¹⁴ mg/kg – milligrams-per-kilogram

Chronic Toxicity	tu _c	24-Hr. Composite	Monthly
Acute Toxicity ¹⁵	% survival	24-Hr. Composite	Monthly

Both test species given below shall be used to measure chronic toxicity:

<u>Species</u>	<u>Effect</u>	<u>Test Duration (Days)</u>	<u>Reference</u>
Fathead Minnow (Pimephales Promelas)	Larval Survival	7	EPA/600/4-91/002 (Chronic) EPA/600/4-90/027F (Acute)
Water Flea (Ceriodaphnia dubia)	Survival; Number of Young	7	EPA/600/4-91/002 (Chronic) EPA/600/4-90/027F (Acute)

Toxicity Test Reference: Methods for measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fourth Edition, EPA/600-4-90-027F, August, 1993. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water for Freshwater Organisms, EPA/600/4-91/002, July, 1994.

Dilution and control waters may be obtained from an unaffected area of receiving waters. Standard dilution is an option and may be used if the above source is suspected to have toxicity greater than 1.0 tu_c. The sensitivity of the test organism to a reference toxicant shall be determined concurrently with each bioassay and reported with the test results.

Chronic toxicity may be expressed and reported as toxic units (tu_c) where:

$$tu_c = 100/NOEC$$

and the No Observed Effect Concentration (NOEC) is expressed as the maximum percent effluent of test water that causes no observed effect on a test organism, as determined in a critical life stage toxicity test indicated above.

Acute toxicity may be calculated from the results of the chronic toxicity test described above and shall be reported along with the results of each chronic test. Acute toxicity shall be expressed as percent survival of test organism over a ninety-six hour period in 100 % effluent.

REPORTING

1. The discharger shall report the results of acute and chronic toxicity testing as determined through standard toxicity protocols using 100% effluent.
2. The discharger shall report with each sample result the applicable Minimum Level (as described in the California Toxics Policy) and the laboratory current Method Detection Limit, as determined by the procedure in 40 CFR 136 (revised as of May 14, 1999).
3. The discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data should be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with waste discharge requirements.

¹⁵ Acute bioassay may be calculated from chronic bioassay test.

4. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurement(s);
 - b. The individual(s) who performed the sampling or measurement(s);
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or method use; and
 - f. The results of such analyses.
5. Monitoring reports shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this monitoring report.
6. Each report shall contain the following statement:

“I declare under the penalty of law that I personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.”
7. A duly authorized representative of the discharger may sign the documents if:
 - a. The authorization is made in writing by the person described above;
 - b. The authorization specified an individual or person having the responsibility for the overall operation of the regulated disposal system; and
 - c. The written authorization is submitted to the Regional Board’s Executive Officer.
8. Reporting of any failure in the waste disposal system shall be as described as in Provision No. 29 to the Regional Board Office and to the Office of Emergency Services.
9. Daily, weekly, and monthly monitoring reports shall be submitted to the Regional Board by the 15th day of the following month. Quarterly monitoring reports shall be submitted by January 15, April 15, July 15, and October 15 of each year. Annual reports shall be submitted by January 15 of each year.
10. Submit reports to:

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260
11. A copy of the monitoring report shall also be sent to:

Regional Administrator
U.S. Environmental Protection Agency
Region 9, Attn: 65/MR, W-3
75 Hawthorne Street
San Francisco, CA 94105

Ordered by: _____
Executive Officer

Date